

* THE MAMMALS AND BIRDS OF KASHMIR AND THE
ADJACENT HILL PROVINCES.

BEING NATURAL HISTORY NOTES.

BY

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(With 7 plates and four photos.)

The task before me is to write a series of articles on the fauna of Kashmir and the adjacent hills; the idea is to produce a book of reference in a popular form and at the same time not to lose sight of the scientific side.

When describing the larger animals, it may be possible to interest a large number of the readers of this magazine, but the naturalist alone will care to study the notes on the small mammals.

The difficulty ahead is the prevailing fashion of sub-dividing species, and giving generic rank which in many instances is not due.

Environment often conduces to change in size and colour. In many cases these characteristics pass from the parent stock to the offspring, this however cannot be said to be the universal rule, hence latent variations may be found in some of the descendants, in plain language a throw back may occur and these variations may be transmitted; hence great caution is required before the acceptance of a new type.

Take the "Voles" as an example, the variations seem to be endless, and many of the smaller Rodentia present great difficulties in their classification.

Without implying that the naturalist is not in need of further knowledge of large animals, it is undoubtedly the case that by far the largest scope for research is amongst the small mammals such as the rats, mice, bats, etc.

Hence it is proposed to note on the larger animals before passing on to the smaller, for this arrangement will give more time in which all the specimens can be arranged and examined.

CLASS—MAMMALIA.

ORDER—UNGULATA.

In this group are included the four-footed animals which have no claws at the ends of their toes, they are provided with sheaths or hoofs into which the digits fit; these vary in number, for instance the elephant has five in the front and four on the hind foot, and each toe has a sheath.

The horse has one hoof, the ruminants and pigs have cloven hoofs which contain the two central toes, whilst the exterior toes are less developed and do not reach the ground, but here again these two are provided with hoofs.

The cloven hoofs stand flat on the ground and are the only ones of any use to the animal except perhaps when it treads on soft snow or mud, even then very little support would be given to the body; it is reasonable to suppose that in some future stage of evolution these apparently useless toes may disappear.

*The following Natural History Notes have been written by Col. Ward as a supplement to his articles on "Big and Small game shooting in Kashmir".

[Eds.]

The feet of the camel do not follow the usual formation of the ruminating quadrupeds, the two toes are enclosed in a common sole and have a fatty covering.

The Ungulates are divided up into various suborders and families, the first to be dealt with is that of the horses.

SUBORDER I.—*PERISSODACTYLA*.

Family—*EQUIDAE*.

THE HORSE, ASS AND ZEBRA.

A single member of this family is found in the area now dealt with:—

THE ASIATIC WILD ASS—*Equus hemionus*, The “Kiang” of Tibetans.

Distribution.—Ladak, Turkistan, Mongolia, and in various countries in Asia.

The variety of wild ass known as the “Ghorka” which differs little from the “Kiang” is found in Cutch, Sind and Baluchistan.

Description.—The colouring of the upper portion of the body is a ruddy chestnut which varies in tinge, in some specimens being more or less red. Underneath white. A dark brown dorsal stripe extends from the nape of the neck to the tuft of the tail, the hair in this tuft is practically black, so also is that round the coronet and at the tip of the ears.

Height of a stallion shot in Ladak just over 11 hands. The skull 18½ ins.

Looking at the body of a “Kiang,” attention is at once drawn to the large size of the head, and the small hard hoofs, which look as if contracted.

The “Kiang” is much given to galloping. On the hard stony plains, its great weight and the velocity with which it travels, but for the protection afforded by nature, would destroy the whole structure of the leg.

The foot bone known as the coffin bone of the horse or ass does not fill the hoof, moreover it is provided with passages which permit the flow of the blood to a padding of fleshy material which is elastic, and thus the jar caused is so much reduced as to be innocuous. The leg of a horse presents a most interesting study, it is very complicated and delicate, but the above note indicates why a “Kiang” can gallop over the rocky ground with impunity.

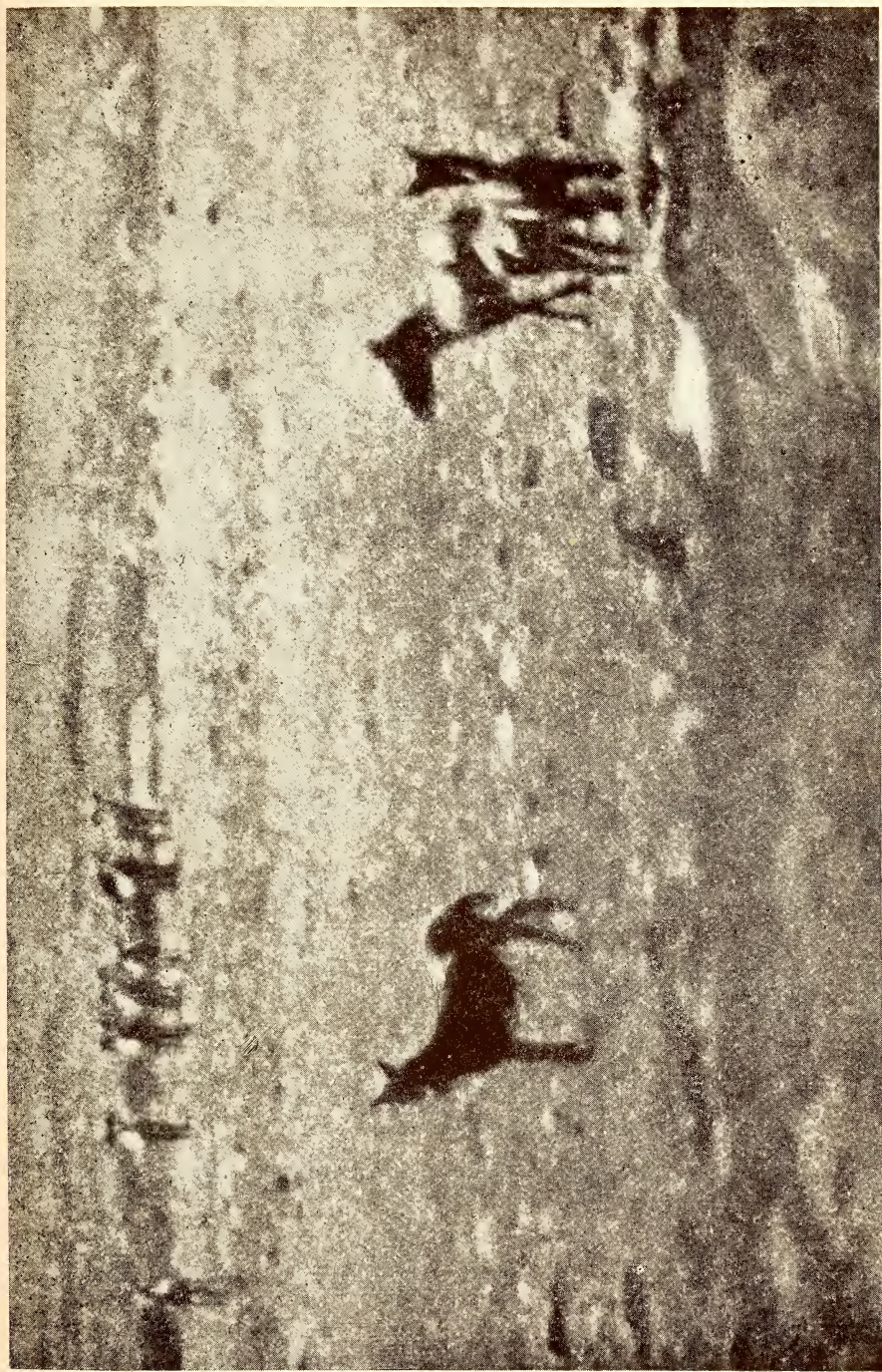
General Notes.

The wild ass is shy but inquisitive; when suspicious the herd will approach at a considerable pace, then, when the danger is confirmed, they will sometime stand for a second or two, snort and gallop off. A herd may consist of almost any number, but as a rule three to ten or twelve asses are to be seen together.

Many a stalk after wild sheep and antelope is spoilt by the “Kiang.” . . . The photographs, for which I am indebted to Col. C. B. Wood, show three asses standing between the wild sheep and the stalker, and the ending of the chance of a shot, for the “Kiang” have got suspicious and given the alarm.

To the sportsman the “Kiang” is only a disadvantage; the skin is useful for the soles of numdah boots and for patching the coverings of mule trunks. The Tartars will eat the flesh, and so also do the wolves.

Rarely a young “Kiang” is caught and partially tamed, one or two were with the Wazir of Ladak’s ponies and wandered about near Leh, but they were very shy.



(Photo by Col. C. B. Wood.)
KIANG STANDING BETWEEN THE STALKER AND HERD OF GREAT TIBETAN SHEEP (*OVIS AMMON HODGSONI*).



(Photo by Col. C. E. Wood.)

KIANG GOING OFF. HAVING FULLY SPOILT THE STALK.

SUBORDER II.—ARTIODACTYLA.

Section A.—PECORA.

Family—BOVIDÆ.

Subfamily i.—*Bovinae*,

Included in this family are cattle, sheep, goats, antelopes and gazelles, all of which have horns consisting of a core covered with a sheath. These are permanent. In many of the species both sexes carry horns. The genus *Bos* has only one representative in the area dealt with.

THE YAK—*Bos grunniens*.

The "Dong" of Tibetans—also the "Bon-Chour"—is found in Northern Ladak and on most of the uplands of Tibet.

Description.—Male. Height 16 hands, a big bull $16\frac{1}{2}$; length 7 ft.; horns 30" to 33" any measurement above this being rare, $35\frac{1}{4}$ " is undoubtedly a correct measurement of a pair, and 39" has been recorded. The females are smaller and have short horns.

An old bull when standing within about 50 yards looked as if it were a mass of black hair with scarcely any length of leg. These masses of hair hung down nearly to the ground from the shoulders and sides, also from the chest. The tail which does not reach the ground had a very large bunch of black hair over a foot in thickness. After shooting the bull the following notes were made:—

"Colouring blackish but with a brown hue—muzzle grey, hoofs very large, fore legs almost entirely concealed by hair, both at the sides and front, probable weight 900 to 1,000 lbs. Height just over 16 hands."

The photo of a bull yak is unfortunately much fore-shortened, but the horns are clear and show the outward and inward curves, they are 31" long and 17" in girth.

The sense of smell is highly developed, as also appears is that of hearing, it is said that sight is deficient but this seems to be doubtful.

General Notes.

Yak are gregarious, seldom found in large herds except in the spring and summer when large numbers of cows and calves congregate on a good grazing ground. Bulls are generally found in parties of three or four until the late summer, when the rutting season commences and extends through July, August and September, then one male is accompanied by four or five or more cows.

The calves are well grown at a year old.

Wild yak cross freely with the Ladaki cattle which are turned out when the pairing season begins. Dr. Heber informs me "The hybrids do not breed at all but the crossing of the yak and cow is quite easy."

The local name of the hybrid is phonetically "Zo" for the male, and "Tsomo" for the female animal. The cross-bred beasts are very sure footed, they are used for riding, and are capable of carrying a load of 200 lbs. on very difficult ground. When the camping ground is reached the yaks are turned out to fend for themselves, up to a certain point they are enduring but when once tired, they lie down and refuse to move. The Ladakis declare that many of the wearied animals get up when hungry and wander off to where they can get grazing, and are retrieved in the following summer.

When starting on a long trip I was pressed to buy a small sized red baggage yak which would bring luck; this animal was seldom loaded for fear the 'mascot' should tire, yet on the return journey, and when within two Marches of Tankse, the driver reported the creature had lain down,

and would not go on and would have to be sent for later. At any rate the purchase of that red 'Zo' was a cheap form of amusement, for the price paid was Rs. 10 only.

There may be some superstition which exalts the red creature into the position of a 'Mascot', but I suspect the Ladaki coveted it and thought of this method of acquiring it.

Subfamily ii.—*Caprinae*.

SHEEP—*Ovis*.

This genus is represented by *O. hodgsoni*, *O. ammon* and *O. poli* and allied forms, but these are the three large sheep of Ladak and Central Asia, and in addition there is *O. vignei*, this last has a wide range in both hot and cold climates and also has closely allied races.

THE GREAT TIBETAN SHEEP—*Ovis ammon hodgsoni*.

This is the Nyan of Ladakis, and is known to sportsmen as the Ammon, whereas the true *Ovis ammon* is the species found in Siberia and Mongolia.

Description.—The ram weighs about 240 lbs. and measures 46" at the shoulder, from between the horns to the tail 5'-4", tail 3".

A very large ram was 47" at the shoulder. Length 5'-5" and scaled 280 lbs.; it owned very thick horns with the points broken off.

There is some doubt as to the size of the largest horns. Rowland Ward's "Records of Big Game" mentions a pair of horns from Tibet as 57". If this was from a Hodgson's ram it is far the longest. Three trophies of 50" to slightly over 51" in length have been carefully measured, one of these had a girth of 19". Horns of 45" with a girth of 17" are good and exceptional.

Judging from many heads of ewes which were picked up, the ewes carry horns of 18", but one pair, found near Haule, was 20" long; they are straight for the greater part of their length and gently twisted at the top. The female is of considerable size and must weigh 150 lbs. or more.

The male is light brown above, and white on the chest, stomach and on the insides of the legs. The ruff is whitish, a dark brown line of long hair extends along the back. Early in the summer the upper portions are greyish brown. When viewed through glasses the white chest and neck are very obvious. Females are brownish on the upper part, the colour merging into a brownish or yellowish-white in the lower parts. I never had a chance of measuring a ewe. The females of the Central Asian sheep are all large.

General Notes.

There is no beard. Like the rest of the sheep, the glands under the eyes and in the division of the cleft hoof are present.

Gregarious and migratory, the Hodgson's sheep wander in small flocks from place to place searching for their food, hence in one year numbers may be found in a tract of country whilst in the next season not a single animal can be seen.

The flocks in the very early summer may consist of both sexes and may number from about three or four to ten or more, then as the season advances four or five rams may be alone; the females and young congregate in mid summer.

As recorded in the "Sportsman's Guide" I have seen three lambs with a single ewe, and on two or more occasions, twins.

Shy by nature, also possessing keen powers of scent and sight, these sheep are hard to approach. When they have taken up their summer quarters, having found grazing, the rams may be sighted day after day,



BULL YAK FROM TIBET (*BOS GRUNNIENS*).



it is therefore desirable to be patient and to wait until the game is favourably placed for a stalk before making the attempt, for once thoroughly frightened they will trek for many miles and ascend the highest mountains. At the best of times it is useless to expect to find them under 14,000' to 16,000' in the summer.

The open ground, which is the general rule in Ladak, tells both ways for and against the sportsman, it may make the stalk difficult, but it enables the game to be located.

Plate IV shows a Hodgson's sheep left out at night to freeze and photographed in the morning by Capt. J. Y. Allan.

Plate V shows heads of three animals, including a hybrid between a ram of Hodgson's sheep and a Ewe Urial (Vigne's sheep). This hybrid was at one time called *O. brookei*, and was first noticed in the Rampak ravine, Ladak. Three or four of these cross-bred sheep have since been obtained, whether they would produce offspring or not cannot be discovered, but that the two species occasionally cross is not open to doubt.

The pairing season is in the early winter and the Hodgson's ram probably was driven down to the lower ground by the weather and could easily force the Vigne's ram away.

The cross-bred between Vigne's ram and the Hodgson's ewes is more difficult to explain—possibly the ram was killed and ewes were joined after this by the male Oorial. I have only heard of one such hybrid which was shot by Major Cumberland many years ago. The Oorial must have wintered much higher up the hill than is their usual habit, for the Hodgson's sheep rarely come below 13,000'. The Ladakis say that the presence of the ewes of the Nyan must have been due to their being driven by wolves.

SIBERIAN ARGALI—*Ovis ammon ammon*.

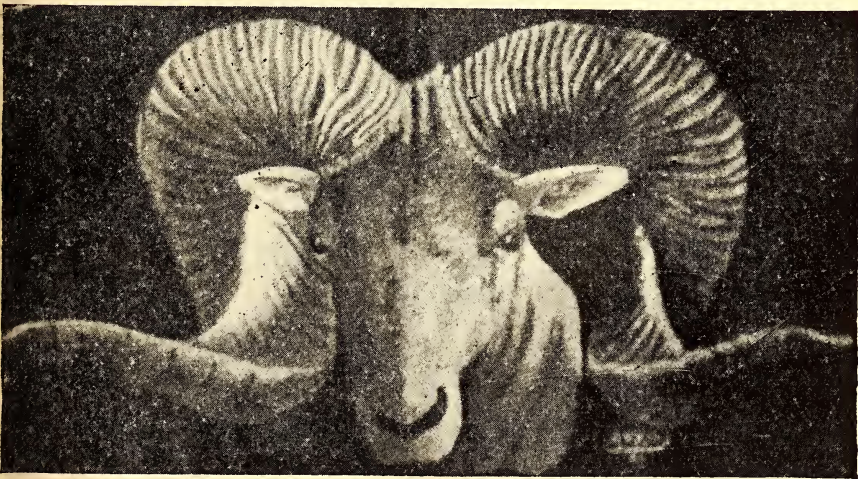


Fig. I.—Typical Siberian or Altai Argali. *Ovis ammon ammon* from the Altai.

Shot by Major C. S. Cumberland

The typical race of Ammon is found in Mongolia and differs from Hodgson's sheep in the shape of the horns and in the absence of the white ruff. It has been stated that the Ammon is the largest of the Central Asian